AF

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NEWS
      1
                 Web Page URLs for STN Seminar Schedule - N. America
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                 "Ask CAS" for self-help around the clock
NEWS
         SEP 09 CA/CAplus records now contain indexing from 1907 to the
     3
                 present
NEWS 4
         DEC 08
                 INPADOC: Legal Status data reloaded
NEWS 5
         SEP 29 DISSABS now available on STN
NEWS 6
         OCT 10 PCTFULL: Two new display fields added
NEWS 7
                 BIOSIS file reloaded and enhanced
         OCT 21
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9 NOV 24 MSDS-CCOHS file reloaded
NEWS 10 DEC 08
                 CABA reloaded with left truncation
NEWS 11 DEC 08
                IMS file names changed
NEWS 12
        DEC 09
                 Experimental property data collected by CAS now available
                 in REGISTRY
NEWS 13
        DEC 09
                 STN Entry Date available for display in REGISTRY and CA/CAplus
        DEC 17
NEWS 14
                 DGENE: Two new display fields added
        DEC 18
NEWS 15
                 BIOTECHNO no longer updated
NEWS 16 DEC 19
                 CROPU no longer updated; subscriber discount no longer
                 available
NEWS 17
        DEC 22
                 Additional INPI reactions and pre-1907 documents added to CAS
                 databases
NEWS 18
        DEC 22
                 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19
        DEC 22
                ABI-INFORM now available on STN
NEWS 20
                 Source of Registration (SR) information in REGISTRY updated
        JAN 27
                 and searchable
NEWS 21
        JAN 27
                A new search aid, the Company Name Thesaurus, available in
                 CA/CAplus
NEWS 22
        FEB 05
                German (DE) application and patent publication number format
                 changes
NEWS 23
        MAR 03
                MEDLINE and LMEDLINE reloaded
NEWS 24
        MAR 03
                MEDLINE file segment of TOXCENTER reloaded
NEWS 25
        MAR 03
                FRANCEPAT now available on STN
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
             MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
             AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
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NEWS INTER
             General Internet Information
             Welcome Banner and News Items
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             Direct Dial and Telecommunication Network Access to STN
NEWS PHONE
NEWS WWW
             CAS World Wide Web Site (general information)
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Enter NEWS followed by the item number or name to see news on that specific topic.

Page 2

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FILE 'HOME' ENTERED AT 16:09:46 ON 09 MAR 2004

=> file regf

'REGF' IS NOT A VALID FILE NAME SESSION CONTINUES IN FILE 'HOME'

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION

_FULL_ESTIMATED_COST

FILE 'REGISTRY' ENTERED AT 16:10:51 ON 09 MAR 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 8 MAR 2004 HIGHEST RN 660388-34-1 DICTIONARY FILE UPDATES: 8 MAR 2004 HIGHEST RN 660388-34-1

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

Uploading c:\program files\stnexp\queries\10018688.15

L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

FULL SEARCH INITIATED 16:11:13 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 167 TO ITERATE

SEARCH TIME: 00.00.01

L21 SEA SSS FUL L1

=> file marpat COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY SESSION 155.42 155.84

FILE 'MARPAT' ENTERED AT 16:11:22 ON 09 MAR 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 140 ISS 10) (20040307/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6683216 27 JAN 2004

DE 10317487 12 FEB 2004

1388563 11 FEB 2004

JP 2004047131 12 FEB 2004

WO 2004011964 05 FEB 2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s ll sss full

FULL SEARCH INITIATED 16:11:28 FILE 'MARPAT' FULL SCREEN SEARCH COMPLETED - 5221 TO ITERATE

93.8% PROCESSED 4897 ITERATIONS

5 ANSWERS

100.0% PROCESSED 5221 ITERATIONS

5 ANSWERS

SEARCH TIME: 00.00.29

10018688.15 Page 4

L3 5 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 109.42 265.26

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 16:12:08 ON 09 MAR 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 9 Mar 2004 VOL 140 ISS 11 FILE LAST UPDATED: 8 Mar 2004 (20040308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 16:09:46 ON 09 MAR 2004)

FILE 'REGISTRY' ENTERED AT 16:10:51 ON 09 MAR 2004

L1 STRUCTURE UPLOADED

L2 1 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 16:11:22 ON 09 MAR 2004 L3 5 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 16:12:08 ON 09 MAR 2004

=> s 12

L4 1 L2

=> s 13

L5 5 L3

=> d 14 fbib hitstr abs total

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:31502 CAPLUS

DN 134:100881

TI Preparation of fused imidazole compounds and remedies for diabetes mellitus

IN Asano, Osamu; Harada, Hitoshi; Yoshikawa, Seiji; Watanabe, Nobuhisa;

Patel <3/9/2004>

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Page 5
```

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Inoue, Takashi; Horizoe, Tatsuo; Yasuda, Nobuyuki; Oohashi, Kaya; Minami,
     Hiroe; Nagaoka, Junsaku; Murakami, Manabu; Kobayashi, Seiichi; Tanaka,
     Isao; Kawata, Tsutomu; Shimomura, Naoyuki; Akamatsu, Hirofumi; Ozeki,
     Naoki; Shimizu, Toshikazu; Hayashi, Kenji; Haga, Toyokazu; Negi, Shigeto;
     Naito, Toshihiko
PA
     Eisai Co., Ltd., Japan
SO
     PCT Int. Appl., 130 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
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                           _____
                                          ------
PΙ
     WO 2001002400
                     A1 20010111
                                         WO 2000-JP4358
                                                          20000630
        W: AU, BR, CA, CN, HU, IL, JP, KR, MX, NO, NZ, RU, US, ZA
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
                                          JP 1999-188484 A 19990702
                                          JP 2000-143495 A 20000516
                                         JP 2000-182786 A 20000619
    AU 2000055717
                           20010122
                      Α5
                                         AU 2000-55717
                                                        20000630
                    JP-1999-188484-A-19990702
                                         JP 2000-143495 A 20000516
                                         JP 2000-182786 A 20000619
                                         WO 2000-JP4358 W 20000630
     EP 1221444
                                         EP 2000-940909 20000630
                      A1
                           20020710
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI, CY
                                         JP 1999-188484 A 19990702
                                         JP 2000-143495 A 20000516
                                         JP 2000-182786 A 20000619
                                         WO 2000-JP4358 W 20000630
OS
    MARPAT 134:100881
IT
    318468-74-5P
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
       (preparation of fused imidazole compds. as antagonists of adenosine A2
       receptors and remedies for diabetes mellitus)
```

2(1H)-Pyridinone, 5-[(5-amino-6-chloro-4-pyrimidinyl)amino]-1-methyl-

318468-74-5 CAPLUS

(9CI) (CA INDEX NAME)

GI

RN

CN

$$R^{2}$$
 Q
 N
 R^{3}
 R^{3

Novel fused imidazole compds. such as purine derivs. of general formula AΒ (I), pharmacol. acceptable salts thereof, or hydrates of both [wherein R1 = H, OH, halo, (un) substituted C1-8 alkyl, (un) substituted NH2; R2 = H, halo, (un) substituted NH2, (un) substituted C2-8 alkenyl, (un) substituted C3-8 alkynyl, (un) substituted C1-8 alkyl; R3 = (un) substituted C3-8 alkynyl, C3-8 alkenyl, (un) substituted C1-8 alkyl, (un) substituted aryl, (un) substituted heteroaryl, etc.; Ar = (un) substituted aryl, (un) substituted heteroary1, optionally halo- or C1-6 alky1-substituted N-C1-6 alkyl- or N-C3-6 cycloalkyl-oxopyridyl or -oxopyrimidyl; Q, W = N, CH; some proviso are given] are prepared These compds. exhibit adenosine A2 receptor antagonism and are effective in the prevention and treatment of diabetes.mellitus-and-complications-of-diabetes. Thus; 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1,2-dihydro-2-pyridinone was condensed with N,N-dimethylformamide di-Me acetal in DMF at room temperature for

1 h, ice-cooled, treated with NaH at 0-6° for 30 min, and methylated by Me iodide at room temperature for 16 h to give 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-methyl-1,2-dihydro-2pyridinone (II). II.HCl at 10 mg/kg p.o. in spontaneously diabetic mice lowered the blood sugar level to $47.3\pm7.2\%$ of the control animal.

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 26 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d 15 fbib hitstr abs total

ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN **L**5

AN 2001:923769 CAPLUS

DN

Preparation of 1,2-dihydropyridinone compounds and use thereof as AMPA receptor and kainite receptor inhibitors

IN Nagato, Satoshi; Ueno, Kohshi; Kawano, Koki; Norimine, Yoshihiko; Ito, Koichi, Hanada, Takahisa, Ueno, Masataka, Amino, Hiroyuki, Ogo, Makoto, Hatakeyama, Shinji; Urawa, Yoshio; Naka, Hiroyuki; Groom, Anthony John; Rivers, Leanne; Smith, Terence

PΑ Eisai Co., Ltd., Japan

SO PCT Int. Appl., 284 pp. CODEN: PIXXD2

DT Patent

ΤıA Japanese

FAN. CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2001-JP4857 WO 2001096308 20011220 PI A1 20010608 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,

Patel

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10018688.15 Page 7
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HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, RJ CF, CG, CI, CM, GA, GN, CW, MI, MP, NE, SN, TD, TG
           BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                    JP 2000-175966 A 20000612
                                                    GB 2000-22483 A 20000913
                               20011224
AU 2001062723
                      A5
                                                    AU 2001-62723 20010608
                                                    JP 2000-175966 A 20000612
                                                    GB 2000-22483 A 20000913
                                                    WO 2001-JP4857 W 20010608
EP 1300396
                        A1 20030409
                                                    EP 2001-936920 20010608
     R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                    JP 2000-175966 A 20000612
                                                    GB 2000-22483 A 20000913
                                                    WO 2001-JP4857 W 20010608
US 2004023973
                        Α1
                               20040205
                                                    US 2002-296719 20021126
                                                   JP 2000-175966 A 20000612
                                     WO 2001-JP4857 W 20010608
NO 2002005955
                   A
                               20030212
                                                    NO 2002-5955 20021211
                                                    JP 2000-175966 A 20000612
                                                    GB 2000-22483 A 20000913
                                                    WO 2001-JP4857 W 20010608
MARPAT 136:53682
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$$R^4$$
 R^5
 R^1
 R^2
 R^2
 R^2
 R^2

OS

GΙ

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10018688.15
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Page 8

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AB
     Title compds. [I; Q = NH, O, S; R1, R2, R3, R4, R5 each independently = H,
     halo, C1-6 alkyl-XA; X = single bond, C1-6 alkylene; A = C6-14 aromatic
     carbocyclic, C6-14 aromatic heterocyclic], salts, hydrates, and
     3-(2-cyanophenyl)-4-(2-pyridyl)-2-methoxypyridine, exhibiting excellent
     inhibitory activities against AMPA receptor and/or kainite receptor, are
     prepared Thus, the title compound II was prepared and orally tested effective
     as anti-AMPA-induced-spasm agent in male ddy mouse and in vitro
     anti-AMPA-induced nerve cell calcium influx.
RE.CNT 10
              THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
L5
AN
     2001:31502 CAPLUS
DN
     134:100881
     Preparation of fused imidazole compounds and remedies for diabetes
TI
     mellitus
    Asano, Osamu; Harada, Hitoshi; Yoshikawa, Seiji; Watanabe, Nobuhisa;
IN
     Inoue, Takashi; Horizoe, Tatsuo; Yasuda, Nobuyuki; Oohashi, Kaya; Minami,
     Hiroe; Nagaoka, Junsaku; Murakami, Manabu; Kobayashi, Seiichi; Tanaka,
     Isao; Kawata, Tsutomu; Shimomura, Naoyuki; Akamatsu, Hirofumi; Ozeki,
     Naoki; Shimizu, Toshikazu; Hayashi, Kenji; Haga, Toyokazu; Negi, Shigeto;
    _Naito,__Toshihiko
PΑ
     Eisai Co., Ltd., Japan
SO
     PCT Int. Appl., 130 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
    Japanese
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
     -----
                           -----
PΙ
    WO 2001002400
                     A1
                                         WO 2000-JP4358 20000630
                           20010111
        W: AU, BR, CA, CN, HU, IL, JP, KR, MX, NO, NZ, RU, US, ZA
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
                                          JP 1999-188484 A 19990702
                                           JP 2000-143495 A 20000516
                                          JP 2000-182786 A 20000619
    AU 2000055717
                      A5
                           20010122
                                          AU 2000-55717
                                                          20000630
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                                          JP 2000-182786 A 20000619
                                          WO 2000-JP4358 W 20000630
    EP 1221444
                      A1
                           20020710
                                          EP 2000-940909 20000630
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI, CY
                                          JP 1999-188484 A 19990702
                                          JP 2000-143495 A 20000516
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OS

GΙ

MARPAT 134:100881

JP 2000-182786 A 20000619 WO 2000-JP4358 W 20000630

Page 9

$$\mathbb{R}^{2}$$
 \mathbb{Q}
 \mathbb{N}
 \mathbb{R}^{3}
 \mathbb{R}^{3}
 \mathbb{R}^{3}

ΔR Novel fused imidazole compds. such as purine derivs. of general formula (I), pharmacol. acceptable salts thereof, or hydrates of both [wherein R1 = H, OH, halo, (un) substituted C1-8 alkyl, (un) substituted NH2; R2 = H, halo, (un) substituted NH2, (un) substituted C2-8 alkenyl, (un) substituted C3-8 alkynyl, (un) substituted C1-8 alkyl; R3 = (un) substituted C3-8 alkynyl, C3-8 alkenyl, (un) substituted C1-8 alkyl, (un) substituted aryl, (un) substituted heteroaryl, etc.; Ar = (un) substituted aryl, (un) substituted heteroaryl, optionally halo- or C1-6 alkyl-substituted N-C1-6 alkyl- or N-C3-6 cycloalkyl-oxopyridyl or -oxopyrimidyl; Q, W = N, CH; some proviso are given] are prepared These compds. exhibit adenosine A2 receptor antagonism and are effective in the prevention and treatment of diabetes-mellitus-and-complications-of-diabetes-Thus,-5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1,2-dihydro-2-pyridinone was condensed with N,N-dimethylformamide di-Me acetal in DMF at room temperature for

1 h, ice-cooled, treated with NaH at 0-6° for 30 min, and methylated by Me iodide at room temperature for 16 h to give 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-methyl-1,2-dihydro-2pyridinone (II). II.HCl at 10 mg/kg p.o. in spontaneously diabetic mice lowered the blood sugar level to 47.3±7.2% of the control animal.

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 26 ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN L_5
- AN 1999:78618 CAPLUS
- DN 130:183929
- TΙ Formation of full-color images with good fastness and sharpness by ink-jet printing
- ΙN Sano, Hideo; Yamada, Masahiro
- PΑ Mitsubishi Chemical Industries Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 21 pp. CODEN: JKXXAF
- DTPatent
- LΑ Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 11029729	A2	19990202	JP 1997-183671	19970709
				JP 1997-183671	19970709

OS MARPAT 130:183929

GΙ

Title color images are formed by using water-thinned inks containing (A) AΒ _magenta_inks_of_naphthalenedisulfonic_acid-type-azo-dye-I-{R1-6 = (substituted) alkyl, halogen, H, OH, (substituted) carbamoyl, (substituted) sulfamoyl, (substituted) amino, NO2, sulfonate ester, sulfonyl, carboxy, carboxy ester; m, n = 0-2; X1, X2 = OH, hydrocarbyloxy; Y = amino-terminated polyoxyalkylene, spiro ring-containing group, etc.], (B) yellow inks comprising C.I. Acid Yellow 23, C.I. Direct Yellow 86, C.I. Direct Yellow 132, C.I. Direct Yellow 142, or dyes ArN: NJNR15X3 (NR16LNR17X4) qNR18J1N: NAr1 [Ar, Ar1 = (substituted) aryl containing CO2H or COSH groups; J, J1 = specified (hetero)cyclic groups; R15-18 = H, (substituted) alkyl; q = 0, 1; L = divalent group; X3, X4 =carbonyl, etc.] and/or (C) cyan inks comprising C.I. Direct Blue 86, C.I. Direct Blue 199, C.I. Acid Blue 9, and dyes Pc(SO3H)j(SO2NR26L1NR27X4NR28G)k [Pc = metal-containing phthalocyanine; R26-28 = H, alkyl, alkenyl, aralkyl, etc.; L1 = divalent group; X4 = carbonyl group, specified heterocyclic groups]. Thus, an ink containing an I, C.I. Acid Yellow 23, and C.I. Direct Blue 86 gave clear images with good light resistance.

Ι

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L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
```

AN 1996:476690 CAPLUS

DN 125:117643

TI Ink-jet printing inks and printing devices

IN Teraoka, Hisashi; Takizawa, Yoshihisa; Sato, Shinichi; Katsuragi, Takashi

PA Canon Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 08113744	A2	19960507	JP 1995-239012	19950825
				JP 1994-222706	19940825

OS MARPAT 125:117643

AB The title inks are prepared from dyes containing ≥1 ammonium ion as counter ions, polyols (e.g., glycerol, polyethylene glycol, 1,2,6-hexanetriol, thiodiglycol), organic amines (e.g., diethanolamine, dipropanolamine, triethanolamine), urea or its derivs., and optionally

surfactants.

L5ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

Page 11

AN1996:29832 CAPLUS

DN 124:59484

TIJet-printing inks, printing process and apparatus therewith

Saito, Eriko; Takizawa, Yoshihisa; Yamamoto, Mayumi; Sato, Shinichi; Nagashima, Satoshi; Teraoka, Hisashi

PΑ Canon Kk, Japan

Jpn. Kokai Tokkyo Koho, 17 pp. SO

CODEN: JKXXAF

DTPatent

LΑ Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 07238245	A2	19950912	JP 1994-51127	19940225
				JP 1994-51127	19940225

OS MARPAT 124:59484

Title inks, showing good anticlogging and storage stability and giving water-resistant sharp prints on neutral or acidic paper sheets, contain acid_form-azo-dyes-and-alkyl--,-carboxy--,-and/or-sulfonato-secondary-amine-(derivs.) and/or tertiary amine (derivs.). A typical ink comprised water, thiodiglycol, an azo dye, C12H25NHC3H6NHCH2COONH4, urea, and (NH4)2SO4.

=> log y COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY 18.34	SESSION 283.60
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.16	-4.16

STN INTERNATIONAL LOGOFF AT 16:13:34 ON 09 MAR 2004

Welcome to STN International! Enter x:x

LOGINID:ssspta1611sxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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                 "Ask CAS" for self-help around the clock
NEWS 2
NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the
                 present
                INPADOC: Legal Status data reloaded
NEWS 4 DEC 08
NEWS 5 SEP 29 DISSABS now available on STN
NEWS 6 OCT 10 PCTFULL: Two new display fields added
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced
NEWS - -8 -- OCT 28 -- BIOSIS -file segment - of TOXCENTER - reloaded and - enhanced --
NEWS 9 NOV 24 MSDS-CCOHS file reloaded
NEWS 10 DEC 08 CABA reloaded with left truncation
NEWS 11 DEC 08
                IMS file names changed
NEWS 12 DEC 09 Experimental property data collected by CAS now available
                 in REGISTRY
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 14 DEC 17
                 DGENE: Two new display fields added
NEWS 15 DEC 18
                 BIOTECHNO no longer updated
NEWS 16 DEC 19
                 CROPU no longer updated; subscriber discount no longer
                 available
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS
                 databases
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19 DEC 22 ABI-INFORM now available on STN
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated
                 and searchable
NEWS 21 JAN 27
                 A new search aid, the Company Name Thesaurus, available in
                 CA/CAplus
NEWS 22 FEB 05 German (DE) application and patent publication number format
                 changes
NEWS 23 MAR 03 MEDLINE and LMEDLINE reloaded
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 25 MAR 03 FRANCEPAT now available on STN
NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
              MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP).
              AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS INTER
              General Internet Information
NEWS LOGIN
              Welcome Banner and News Items
NEWS PHONE
              Direct Dial and Telecommunication Network Access to STN
NEWS WWW
              CAS World Wide Web Site (general information)
```

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10018688.16 Page 2

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FILE 'HOME' ENTERED AT 16:19:17 ON 09 MAR 2004

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 16:19:30 ON 09 MAR 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 8 MAR 2004 HIGHEST RN 660388-34-1 DICTIONARY FILE UPDATES: 8 MAR 2004 HIGHEST RN 660388-34-1

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

Uploading c:\program files\stnexp\queries\10018688.16

L1 STRUCTURE UPLOADED

=> d ll L1 HAS NO ANSWERS L1 STR 10018688.16 Page 3

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full FULL SEARCH INITIATED 16:19:53 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 50 TO ITERATE

100.0% PROCESSED 50 ITERATIONS

16 ANSWERS

SEARCH TIME: 00.00.01

L2 16 SEA SSS FUL L1

=> file marpat

COST IN U.S. DOLLARS

SINCE FILE

TOTAL SESSION

FULL ESTIMATED COST

ENTRY 155.42

155.63

FILE 'MARPAT' ENTERED AT 16:19:59 ON 09 MAR 2004
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FILE CONTENT: 1988-PRESENT (VOL 140 ISS 10) (20040307/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6683216 27 JAN 2004
DE 10317487 12 FEB 2004
EP 1388563 11 FEB 2004
JP 2004047131 12 FEB 2004

WO 2004011964 05 FEB 2004

Patel

10018688.16 Page 4

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s l1 sss full FULL SEARCH INITIATED 16:20:05 FILE 'MARPAT' FULL SCREEN SEARCH COMPLETED - 400 TO ITERATE

100.0% PROCESSED 400 ITERATIONS 1 ANSWERS SEARCH TIME: 00.00.05

L31 SEA SSS FUL L1

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 109.42 265.05

FILE 'CAPLUS' ENTERED AT 16:20:16 ON 09 MAR 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 9 Mar 2004 VOL 140 ISS 11 FILE LAST UPDATED: 8 Mar 2004 (20040308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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(FILE 'HOME' ENTERED AT 16:19:17 ON 09 MAR 2004)

FILE 'REGISTRY' ENTERED AT 16:19:30 ON 09 MAR 2004 STRUCTURE UPLOADED

L1L216 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 16:19:59 ON 09 MAR 2004 L31 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 16:20:16 ON 09 MAR 2004

=> s 12

L4 1 L2

=> s 13

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10018688.16
                Page 5
L5
            1 L3
=> d 14 fbib hitstr abs total
     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
T.4
ΑN
     2001:31502 CAPLUS
DN
     134:100881
    Preparation of fused imidazole compounds and remedies for diabetes
     mellitus
     Asano, Osamu; Harada, Hitoshi; Yoshikawa, Seiji; Watanabe, Nobuhisa;
     Inoue, Takashi; Horizoe, Tatsuo; Yasuda, Nobuyuki; Oohashi, Kaya; Minami,
     Hiroe; Nagaoka, Junsaku; Murakami, Manabu; Kobayashi, Seiichi; Tanaka,
     Isao; Kawata, Tsutomu; Shimomura, Naoyuki; Akamatsu, Hirofumi; Ozeki,
    Naoki; Shimizu, Toshikazu; Hayashi, Kenji; Haga, Toyokazu; Negi, Shiqeto;
    Naito, Toshihiko
PΑ
     Eisai Co., Ltd., Japan
SO
     PCT Int. Appl., 130 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
    Japanese
FAN.CNT 1
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    WO 2001002400
                    Al 20010111
                                       WO 2000-JP4358
                                                        20000630
        W: AU, BR, CA, CN, HU, IL, JP, KR, MX, NO, NZ, RU, US, ZA RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
                                        JP 1999-188484 A 19990702
                                        JP 2000-143495 A 20000516
                                        JP 2000-182786 A 20000619
    AU 2000055717
                     A5
                          20010122
                                        AU 2000-55717
                                                         20000630
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                                        JP 2000-143495 A 20000516
                                        JP 2000-182786 A 20000619
                                        WO 2000-JP4358 W 20000630
    EP 1221444
                    A1 20020710
                                        EP 2000-940909 20000630
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI, CY
                                        JP 1999-188484 A 19990702
                                        JP 2000-143495 A 20000516
                                        JP 2000-182786 A 20000619
                                        WO 2000-JP4358 W 20000630
OS
    MARPAT 134:100881
TΤ
    318468-14-3P 318468-15-4P 318468-21-2P
    318468-44-9P 318468-45-0P 318468-46-1P
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318468-48-3P 318468-49-4P 318468-50-7P

318468-51-8P 318468-52-9P 318468-53-0P

318468-63-2P 318468-72-3P 318468-96-1P

318468-97-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of fused imidazole compds. as antagonists of adenosine A2 receptors and remedies for diabetes mellitus)

RN 318468-14-3 CAPLUS

2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

CN

10018688.16 Page 6

$$\mathbb{R}^{-}$$

HC1

RN 318468-15-4 CAPLUS CN 2(1H)-Pyridinone. 5-[6-amino

2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-methyl-(9CI) (CA INDEX NAME)

RN 318468-21-2 CAPLUS

CN 2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-2-propoxy-9H-purin-9-yl]-1-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

Page 7

● HCl

RN 318468-44-9 CAPLUS

CN 2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1,4-dimethyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 318468-45-0 CAPLUS

CN 2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-2-methyl-9H-purin-9-yl]-1-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

Page 8

● HCl

RN 318468-46-1 CAPLUS CN 2(1H)-Pyridinone. 5-

2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-ethyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 318468-48-3 CAPLUS

CN 2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

10018688.16 Page 9

RN 318468-49-4 CAPLUS

CN 2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 318468-50-7 CAPLUS

CN 2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-(2-propenyl)- (9CI) (CA INDEX NAME)

$$_{N}^{NH_{2}}$$
 $_{N}^{NH_{2}}$
 $_{N}^{NH_{2}$

RN 318468-51-8 CAPLUS

CN 1(2H)-Pyridineacetic acid, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-2-oxo- (9CI) (CA INDEX NAME)

10018688.16 Page 10

$$\begin{array}{c|c} & & & \\ & & & \\ N & &$$

RN 318468-52-9 CAPLUS

CN 1(2H)-Pyridinebutanoic acid, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-2-oxo-(9CI) (CA INDEX NAME)

RN 318468-53-0 CAPLUS

CN 1(2H)-Pyridineacetamide, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-2-oxo-(9CI) (CA INDEX NAME)

RN 318468-63-2 CAPLUS

CN 2(1H)-Pyridinone, 5-[6-amino-8-(3-chlorophenyl)-9H-purin-9-yl]-1-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

Page 11

● HCl

RN 318468-72-3 CAPLUS
CN 2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-methyl-, dihydrate (9CI) (CA INDEX NAME)

●2 H₂O

RN 318468-96-1 CAPLUS
CN 2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-2-(3-hydroxy-3-methyl-1-butynyl)-9H-purin-9-yl]-1-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

Page 12

HCl

RN 318468-97-2 CAPLUS

CN 2(1H)-Pyridinone, 5-[6-amino-8-(3-fluorophenyl)-2-[(1-hydroxycyclobutyl)ethynyl]-9H-purin-9-yl]-1-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

GΙ

$$\mathbb{R}^{2}$$
 \mathbb{Q}
 \mathbb{N}
 \mathbb{R}^{3}
 \mathbb{R}^{3}
 \mathbb{R}^{3}

AB Novel fused imidazole compds. such as purine derivs. of general formula (I), pharmacol. acceptable salts thereof, or hydrates of both [wherein R1 = H, OH, halo, (un) substituted C1-8 alkyl, (un) substituted NH2; R2 = H, halo, (un) substituted NH2, (un) substituted C2-8 alkenyl, (un) substituted C3-8 alkynyl, (un) substituted C1-8 alkyl; R3 = (un) substituted C3-8 alkynyl, C3-8 alkenyl, (un)substituted C1-8 alkyl, (un)substituted aryl, (un) substituted heteroaryl, etc.; Ar = (un) substituted aryl, (un) substituted heteroaryl, optionally halo- or C1-6 alkyl-substituted N-C1-6 alkyl- or N-C3-6 cycloalkyl-oxopyridyl or -oxopyrimidyl; Q, W = N, CH; some proviso are given] are prepared These compds. exhibit adenosine A2 receptor antagonism and are effective in the prevention and treatment of 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1,2-dihydro-2-pyridinone was condensed with N,N-dimethylformamide di-Me acetal in DMF at room temperature for

1 h, ice-cooled, treated with NaH at 0-6° for 30 min, and methylated by Me iodide at room temperature for 16 h to give 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-methyl-1,2-dihydro-2-pyridinone (II). II.HCl at 10 mg/kg p.o. in spontaneously diabetic mice lowered the blood sugar level to 47.3±7.2% of the control animal.

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 15 fbib hitstr abs total

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:31502 CAPLUS

DN 134:100881

TI Preparation of fused imidazole compounds and remedies for diabetes mellitus

IN Asano, Osamu; Harada, Hitoshi; Yoshikawa, Seiji; Watanabe, Nobuhisa; Inoue, Takashi; Horizoe, Tatsuo; Yasuda, Nobuyuki; Oohashi, Kaya; Minami, Hiroe; Nagaoka, Junsaku; Murakami, Manabu; Kobayashi, Seiichi; Tanaka, Isao; Kawata, Tsutomu; Shimomura, Naoyuki; Akamatsu, Hirofumi; Ozeki, Naoki; Shimizu, Toshikazu; Hayashi, Kenji; Haga, Toyokazu; Negi, Shigeto; Naito, Toshihiko

PA Eisai Co., Ltd., Japan

SO PCT Int. Appl., 130 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

W: AU, BR, CA, CN, HU, IL, JP, KR, MX, NO, NZ, RU, US, ZA
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

10018688.16 Page 14

PT, SE

JP 1999-188484 A 19990702 JP 2000-143495 A 20000516 JP 2000-182786 A 20000619 AU 2000055717 Α5 20010122 AU 2000-55717 20000630 JP 1999-188484 A 19990702 JP 2000-143495 A 20000516 JP 2000-182786 A 20000619 WO 2000-JP4358 W 20000630 A1 20020710 EP 1221444 EP 2000-940909 20000630

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY

> JP 1999-188484 A 19990702 JP 2000-143495 A 20000516 JP 2000-182786 A 20000619 WO 2000-JP4358 W 20000630

OS MARPAT 134:100881

GΙ

$$\mathbb{R}^{2}$$
 \mathbb{R}^{2}
 \mathbb{R}^{3}
 \mathbb{R}^{3}

Novel fused imidazole compds. such as purine derivs. of general formula AB (I), pharmacol. acceptable salts thereof, or hydrates of both [wherein R1 = H, OH, halo, (un) substituted C1-8 alkyl, (un) substituted NH2; R2 = H, halo, (un) substituted NH2, (un) substituted C2-8 alkenyl, (un) substituted C3-8 alkynyl, (un) substituted C1-8 alkyl; R3 = (un) substituted C3-8 alkynyl, C3-8 alkenyl, (un) substituted C1-8 alkyl, (un) substituted aryl, (un) substituted heteroaryl, etc.; Ar = (un) substituted aryl, (un) substituted heteroaryl, optionally halo- or C1-6 alkyl-substituted N-C1-6 alkyl- or N-C3-6 cycloalkyl-oxopyridyl or -oxopyrimidyl; O, W = N, CH; some proviso are given] are prepared These compds. exhibit adenosine A2 receptor antagonism and are effective in the prevention and treatment of diabetes mellitus and complications of diabetes. Thus, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1,2-dihydro-2-pyridinone was condensed with N,N-dimethylformamide di-Me acetal in DMF at room temperature

for

1 h, ice-cooled, treated with NaH at 0-6° for 30 min, and methylated by Me iodide at room temperature for 16 h to give 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-methyl-1,2-dihydro-2pyridinone (II). II.HCl at 10 mg/kg p.o. in spontaneously diabetic mice lowered the blood sugar level to $47.3\pm7.2\%$ of the control animal.

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s purine and diabetes 163 PURINE AND DIABETES 1.6

=> s 16 and 14

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10018688.16
              Page 15
L7
           1 L6 AND L4
=> s 16 and 15
L8
           1 L6 AND L5
=> s 16 and 4-amino
L9
           2 L6 AND 4-AMINO
=> d 19 fbib hitstr abs total
L9
    ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
    2003:376865 CAPLUS
AN
DN
    138:385444
    Preparation of substituted adenines as drugs, cosmetics, and agrochemical
TI
    growth regulators.
    Dolezal, Karel; Popa, Igor; Holub, Jan; Lenobel, Rene; Werbrouck, Stefaan;
IN
    Strnad, Miroslav; Zatloukal, Marek
    Ustav Experimentalni Botaniky Akademie Ved Ceske Republiky, Czech Rep.
PA
SO
    PCT Int. Appl., 67 pp.
    CODEN: PIXXD2
DT
    Patent
FAN.CNT 1
    PATENT NO.
                  KIND DATE
                                     APPLICATION NO. DATE
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                                   · -----
                                   WO 2002-CZ45 20020801
PΙ
    WO 2003040144
                  A2
                        20030515
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           PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
           NE, SN, TD, TG
                                     CZ 2001-2818
                                                 A 20010802
OS
    MARPAT 138:385444
GΙ
```

AB Title compds. [I; R2 = H, halo, OH, alkoxy, amino, hydrazo, SH, CO2H, cyano, NO2, amido, sulfo, sulfamido, acylamino, acyloxy, cycloalkyl, etc.; R6 = (substituted) alkyl, cycloalkyl, aryl, heterocyclyl, heteroaryl, aralkyl, cycloalkylalkylalkyl, amido, sulfo, etc.], were prepared Thus, 6-chloropurine, 3-chlorobenzylamine, and Et3N were heated in BuOH at 90° for 4 h to give 95% 6-(3-chlorobenzylamino)purine.

This showed IC50 = 148.6 μM against G-361 cancer cells.

```
L9
     ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN
     2001:31502 CAPLUS
DN
     134:100881
TI
     Preparation of fused imidazole compounds and remedies for diabetes
    mellitus
ΙN
    Asano, Osamu; Harada, Hitoshi; Yoshikawa, Seiji; Watanabe, Nobuhisa;
     Inoue, Takashi; Horizoe, Tatsuo; Yasuda, Nobuyuki; Oohashi, Kaya; Minami,
    Hiroe; Nagaoka, Junsaku; Murakami, Manabu; Kobayashi, Seiichi; Tanaka,
     Isao; Kawata, Tsutomu; Shimomura, Naoyuki; Akamatsu, Hirofumi; Ozeki,
    Naoki; Shimizu, Toshikazu; Hayashi, Kenji; Haga, Toyokazu; Negi, Shigeto;
    Naito, Toshihiko
PA
    Eisai Co., Ltd., Japan
SO
    PCT Int. Appl., 130 pp.
    CODEN: PIXXD2
DT
    Patent
LΑ
    Japanese
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
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PΙ
    WO 2001002400
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                          20020710
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                                                        20000630
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            IE, FI, CY
                                        JP 1999-188484 A 19990702
                                        JP 2000-143495 A 20000516
                                        JP 2000-182786 A 20000619
                                        WO 2000-JP4358 W 20000630
OS
    MARPAT 134:100881
GΙ
```

$$\mathbb{R}^{2}$$
 \mathbb{Q}
 \mathbb{N}
 \mathbb{R}^{3}
 \mathbb{R}^{3}
 \mathbb{R}^{3}

AB Novel fused imidazole compds. such as **purine** derivs. of general formula (I), pharmacol. acceptable salts thereof, or hydrates of both [wherein R1 = H, OH, halo, (un)substituted C1-8 alkyl, (un)substituted

NH2; R2 = H, halo, (un) substituted NH2, (un) substituted C2-8 alkenyl, (un)substituted C3-8 alkynyl, (un)substituted C1-8 alkyl; R3 =
(un)substituted C3-8 alkynyl, C3-8 alkenyl, (un)substituted C1-8 alkyl, (un) substituted aryl, (un) substituted heteroaryl, etc.; Ar = (un) substituted aryl, (un) substituted heteroaryl, optionally halo- or C1-6alkyl-substituted N-C1-6 alkyl- or N-C3-6 cycloalkyl-oxopyridyl or -oxopyrimidyl; Q, W = N, CH; some proviso are given] are prepared These compds. exhibit adenosine A2 receptor antagonism and are effective in the prevention and treatment of diabetes mellitus and complications of diabetes. Thus, 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1,2-dihydro-2-pyridinone was condensed with N,N-dimethylformamide di-Me acetal in DMF at room temperature for 1 h, ice-cooled, treated with NaH at $0-6^{\circ}$ for 30 min, and methylated by Me iodide at room temperature for 16 h to give 5-[6-amino-8-(3-fluorophenyl)-9H-purin-9-yl]-1-methyl-1,2-dihydro-2-pyridinone (II). II.HCl at 10 mg/kg p.o. in spontaneously diabetic mice lowered the blood sugar level to $47.3\pm7.2\%$ of the control animal. RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d his
          (FILE 'HOME' ENTERED AT 16:19:17 ON 09 MAR 2004)
     FILE 'REGISTRY' ENTERED AT 16:19:30 ON 09 MAR 2004
L1
               STRUCTURE UPLOADED
L2
            16 S L1 SSS FULL
     FILE 'MARPAT' ENTERED AT 16:19:59 ON 09 MAR 2004
L3
             1 S L1 SSS FULL
    FILE 'CAPLUS' ENTERED AT 16:20:16 ON 09 MAR 2004
L4
             1 S L2
L5
             1 S L3
L6
           163 S PURINE AND DIABETES
L7
             1 S L6 AND L4
L8
             1 S L6 AND L5
L9
             2 S L6 AND 4-AMINO
=> s 16 and 1,2-biphenyl
            0 L6 AND 1,2-BIPHENYL
=>
=> s 16 and 1-pyridine
            0 L6 AND 1-PYRIDINE
=> s 16 and pyridone
L12
            0 L6 AND PYRIDONE
=> s 16 and 2-phenyl
           1 L6 AND 2-PHENYL
=> s 16 and halogenated phenyl
            0 L6 AND HALOGENATED PHENYL
=> d l13 fbib hitstr abs total
L13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
```

- AN 2003:320891 CAPLUS
- DN 139:160965
- TI Free radical scavengers can modulate the DNA-damaging action of alloxan
- AU Blasiak, Janusz; Sikora, Agnieszka; Czechowska, Agnieszka; Drzewoski, Jozef
- CS Department of Molecular Genetics, University of Lodz, Lodz, 90-237, Pol.
- SO Acta Biochimica Polonica (2003), 50(1), 205-210 CODEN: ABPLAF; ISSN: 0001-527X
- PB Polish Biochemical Society
- DT Journal
- LA English

alkylation.

AB Alloxan can generate diabetes in exptl. animals and its action can be associated with the production of free radicals. It is therefore important to check how different substances often referred to as free radical scavengers may interact with alloxan, especially that some of these substance may show both pro- and antioxidant activities. Using the alkaline comet assay the authors showed that alloxan at concns. 0.01-50 μM induced DNA damage in normal human lymphocytes in a dose-dependent manner. Treated cells were able to recover within a 120-min incubation. Vitamins C and E at 10 and 50 μM diminished the extent of DNA damage induced by 50 μM alloxan. Pre-treatment of the lymphocytes with a nitrone spin 2-phenyl-1,2-benzisoselenazol-3(2H)-one), which mimics glutathione peroxides, reduced the alloxan-evoked DNA damage. The cells exposed to alloxan and treated with formamidopyrimidine-DNA glycosylase (Fpg) and 3-methyladenine-DNA glycosylase II (AlkA), enzymes recognizing oxidized and alkylated bases, resp., displayed greater extent of DNA damage than those not treated with these enzymes. The results confirmed that free radicals are involved in the formation of DNA lesions induced by alloxan. The results also suggest that alloxan can generate oxidized DNA bases with a preference for purines and contribute to their

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